

# **ATSDR's Public Health Assessment Evaluation of Exposures to Savannah River Site Related Contaminants in Biota**

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SRS Citizen's Advisory Board Meeting  
September 26, 2011

The findings and conclusions in this presentation have not been formally disseminated by the Agency for Toxic Substances and Disease Registry and should not be construed to represent any agency determination or policy."

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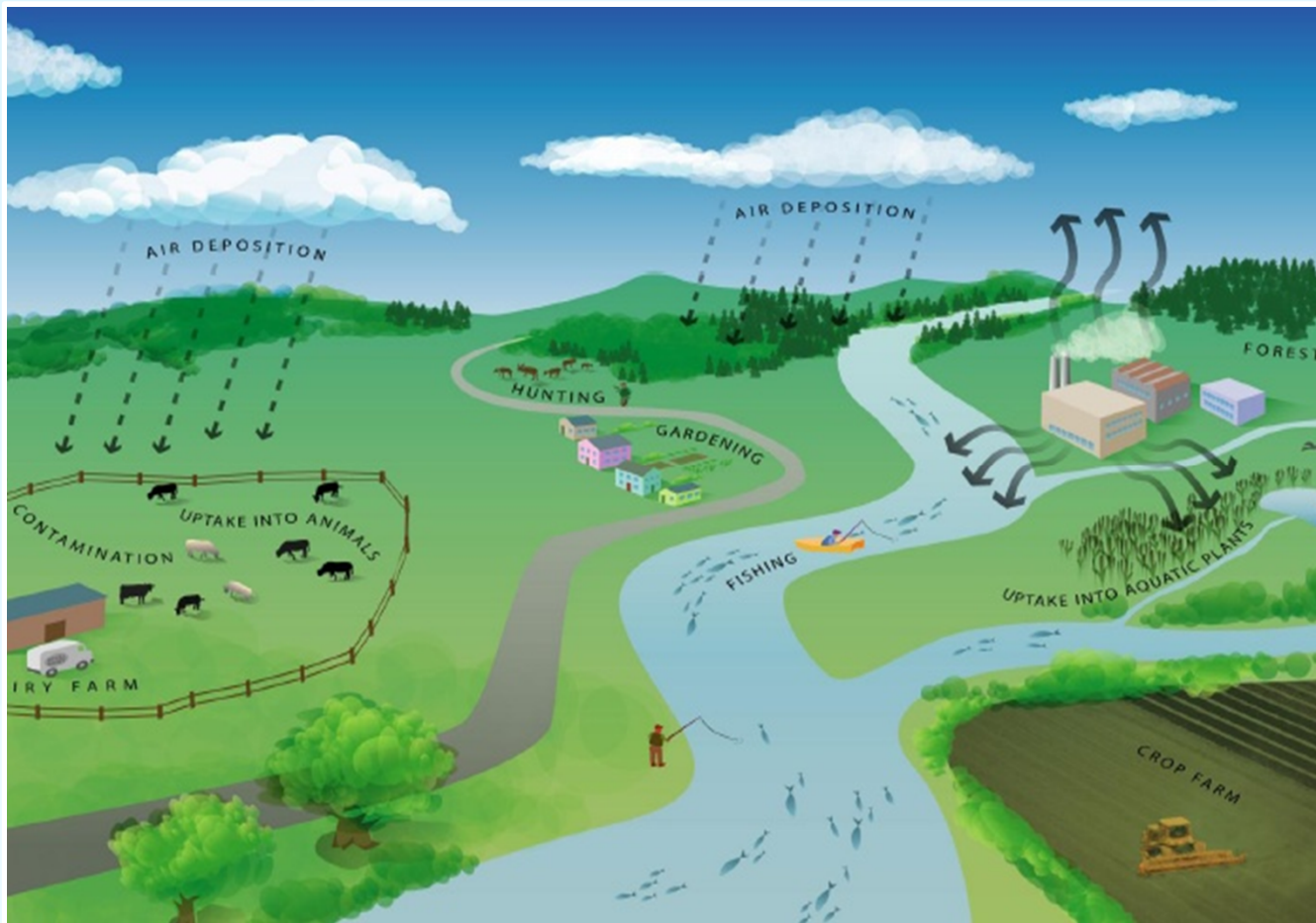


## **Who is ATSDR?**

- ❑ ATSDR is part of the U.S. Department of Health and Human Services and a sister agency to the Centers for Disease Control and Prevention (CDC)**
- ❑ ATSDR was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, commonly known as Superfund. The law requires ATSDR to conduct public health assessments at sites proposed for EPA's National Priorities List (NPL). The Savannah River Site (SRS) was listed on the NPL in 1989.**

## **CDC and ATSDR Activities at SRS**

- ❑ CDC addressed community exposures to radioactive materials released from SRS from 1954 through 1992 in a dose reconstruction project completed in 2005.**
- ❑ In 2007, ATSDR issued a public health assessment (PHA) evaluating human exposures to offsite groundwater and surface water contamination starting in 1993.**
- ❑ This PHA evaluates human exposures from eating plants and animals potentially contaminated with radioactive and chemical contaminants from 1993 through 2008.**



**Pathways for Contaminating Biota**

## Conclusions

- ❑ The general population is not exposed to harmful levels of *radioactive contaminants* if they eat *offsite* crops, livestock, fish, and wild game harvested or produced near SRS.
- ❑ Persons eating *onsite* animals harvested during controlled hunts are not likely to be exposed to harmful levels of *radioactive contaminants*.

## Conclusions (continued)

- ❑ ***Mercury* concentrations are elevated in some *fish* found in the Savannah River. Consuming fish (e.g., largemouth bass, bowfin, and catfish) from certain portions of the river might increase health risks, especially to sensitive populations (e.g., fetuses and nursing infants whose mother ingests mercury-contaminated fish).**

## **Conclusions (continued)**

- ❑ **Some fish from the Savannah River can be eaten without harm to people's health if species-specific consumption advisories issued by South Carolina and Georgia are followed.**

**South Carolina:**

**<http://www.scdhec.net/environment/water/fish/advisories.htm>**

**Georgia: [http://www.gaepd.org/Documents/fish\\_guide.html](http://www.gaepd.org/Documents/fish_guide.html)**

## **Conclusions (continued)**

- ❑ ***Mercury and other metals*** have been measured in a small number of *wild game species* at or near the site. In general, the concentrations in wild game offsite were considerably lower than levels in wild game onsite.

**However, additional monitoring of edible portions of wild game is needed to better characterize the nature and concentration of mercury in species such as deer, feral hogs, ducks, and alligators.**



## Conclusions (continued)

- ❑ Due to limited data, ATSDR could not make a public health conclusion about *non-metal contaminants* (e.g., pesticides, polychlorinated biphenyls, dioxins/furans) in fish, wild game, local produce, and livestock.

However, SRS-related activities would not be expected to result in *local produce or livestock* accumulating harmful levels of these chemicals. Additional sampling of edible portions of *wild game and fish* is needed.

## **Recommendations**

- ❑ DOE should be aware of the types of biota consumed by humans and provide adequate monitoring for all types that may be contaminated by site activities.**
- ❑ DOE should continue to monitor biota both on and off the site until all cleanup activities are completed and no old or new sources of contamination remain.**
- ❑ DOE should consider routine environmental sampling of turtles for aquatic contaminants, especially for chemicals and radioactive contaminants found predominantly in pond and stream sediments.**

**If you have questions do not hesitate  
to contact me at  
(770)488-0772 or [ccc8@cdc.gov](mailto:ccc8@cdc.gov).  
Thank you for your time.**

**For more information please contact Agency for Toxic Substances and Disease Registry**

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